

Title (en)
OPERATION OF A THREE-PHASE REGENERATIVE DRIVE FROM MIXED DC AND SINGLE PHASE AC POWER SOURCES

Title (de)
BETRIEB EINES REGENERATIVEN DREIPHASEN-ANTRIEBS AUS GEMISCHTEN GLEICHSTROM- UND EINPHASENWECHSELSTROMENERGIEQUELLEN

Title (fr)
FONCTIONNEMENT D'UN ENTRAÎNEMENT RÉGÉNÉRATIF TRIPHASÉ À PARTIR DE SOURCES D'ALIMENTATION EN COURANT CONTINU ET EN COURANT ALTERNATIF MONOPHASÉ MÉLANGÉES

Publication
EP 2358623 B1 20160504 (EN)

Application
EP 08878318 A 20081121

Priority
US 2008012992 W 20081121

Abstract (en)
[origin: WO2010059141A1] A three-phase regenerative drive (20) is operated based upon power from a single-phase AC source (12) and power from a DC source (14). The single-phase AC input power and the DC input power are converted to DC voltage on a DC bus (24) by a three-phase converter (22). DC power is provided from the DC bus (24) to a three-phase inverter having outputs connected to a motor (34). A controller (44) controls operation of the three-phase converter (22) based upon contribution factors of the AC and DC sources (12, 14) during motoring and regeneration. The controller (44) also controls an AC component of current from the DC source to reduce ripple current on the DC bus (24).

IPC 8 full level
B66B 1/30 (2006.01); **H02P 27/00** (2006.01); **H02P 27/06** (2006.01)

CPC (source: EP US)
B66B 1/302 (2013.01 - EP US); **B66B 1/308** (2013.01 - EP US); **H02P 3/14** (2013.01 - US); **H02P 27/00** (2013.01 - EP US); **H02P 27/06** (2013.01 - EP US); **H02P 2201/03** (2013.01 - EP US); **H02P 2201/07** (2013.01 - EP US)

Cited by
US10917029B2; US10468968B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2010059141 A1 20100527; WO 2010059141 A9 20110623; CN 102224097 A 20111019; CN 102224097 B 20140416; EP 2358623 A1 20110824; EP 2358623 A4 20141105; EP 2358623 B1 20160504; ES 2571939 T3 20160527; HK 1163044 A1 20120907; JP 2012509655 A 20120419; JP 5526145 B2 20140618; US 2011247900 A1 20111013; US 8629637 B2 20140114

DOCDB simple family (application)
US 2008012992 W 20081121; CN 200880132089 A 20081121; EP 08878318 A 20081121; ES 08878318 T 20081121; HK 12103668 A 20120413; JP 2011537402 A 20081121; US 200813128798 A 20081121